

pTurboFP650-N vector

Table of restriction sites

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AanI	TTA!TAA	2	1524; 1729
AarI	CACCTGCNNNN!	0	
AarI	!NNNNNNNNGCAGGTG	0	
AasI	GACNNNN!NNGTC	3	1812; 2768; 4557
AatI	AGG!CCT	1	2562
AatII	GACGT!C	4	125; 178; 261; 447
AbsI	CC!TCGAGG	0	
AccI	GT!MKAC	1	640
AccII	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
AccIII	T!CCGGA	0	
Acc16I	TGC!GCA	1	2843
Acc36I	ACCTGCNNNN!	4	1202; 1364; 3009; 3459
Acc36I	!NNNNNNNNGCAGGT	1	2628
Acc65I	G!GTACC	1	645
AccB1I	G!GYRCC	7	465; 645; 736; 796; 1894; 2740; 2775
AccB7I	CCANNNN!NTGG	0	
AccBSI	CCG!CTC	2	2165; 3354
AccBSI	GAG!CGG	3	1384; 2001; 3408
AceIII	CAGCTCNNNNNNN!	1	1697
AceIII	!NNNNNNNNNNGAGCTG	2	552; 682
AciI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 806; 995; 1133; 1235; 1388; 2056; 2059; 2073; 2163; 2411; 2423; 2432; 2444; 2454; 2465; 2511; 2650; 2713; 3215; 3260; 3326; 3352; 3477; 3480; 3628; 3760; 4067; 4211; 4707
AciI	G!CGG	28	370; 403; 528; 651; 830; 1142; 1184; 1384; 2001; 2028; 2116; 2226; 2807; 2871; 2972; 2975; 3255; 3310; 3408; 3546; 3693; 3833; 4076; 4321; 4442; 4461; 4588; 4616
AclI	AA!CGTT	0	
AclWI	GGATCNNNN!	9	668; 970; 2609; 2920; 3166; 3558; 3917; 4015; 4101
AclWI	!NNNNNGATCC	7	580; 655; 1217; 2985; 3529; 3916; 4013
AcoI	Y!GGCCR	7	747; 1340; 1385; 2647; 2821; 3212; 3239
AcsI	R!AATY	4	629; 1555; 1659; 1670
AcuI	CTGAAGNNNNNNNNNNNNNNN!	3	1192; 2887; 3319
AcuI	!NNNNNNNNNNNNNCTTCAG	1	4117
AcvI	CAC!GTG	0	
AcyI	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
AdeI	CACNNN!GTG	1	1857
AfaI	GT!AC	12	219; 244; 299; 332; 383; 540; 647; 727; 877; 1129; 1348; 3047
AfeI	AGC!GCT	1	596
AfiI	CCNNNNN!NNGG	19	49; 793; 906; 1072; 1753; 2079; 2471; 2722; 3266; 3547; 3579; 3711; 3746; 3796; 3828; 4181; 4460; 4626; 4644
AfII	C!TTAAG	1	1623
AfIII	A!CRYGT	1	4659
AgeI	A!CCGGT	1	666
AgsI	TTS!AA	6	759; 2152; 2196; 2206; 2619; 4195
AhdI	GACNNN!NNGTC	0	
AhlI	A!CTAGT	0	
AjiI	CAC!GTC	0	
AjiI	GAC!GTG	0	
Ajnl	!CCWGG	15	88; 281; 857; 905; 1001; 1342; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
AjuI	GAANNNNNNNTTGGNNNNNNNNNNN!	0	
AjuI	!NNNNNNCCAANNNNNNNTTC	0	
AjuI	CCAANNNNNNNTTCNNNNNNNNNNN!	0	
AjuI	!NNNNNNNGAANNNNNNNTTGG	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AleI	CACNN!NNGTG	0	
AlfI	GCANNNNNNTGCNNNNNNNNNNNN!	3	1138; 2315; 2387
AlfI	!NNNNNNNNNNGCANNNNNNNTGC	3	1104; 2281; 2353
AloI	GAACNNNNNNNTCCNNNNNNNNNNNN!	2	1083; 1823
AloI	!NNNNNNNNGGANNNNNNNGTTC	0	
AloI	GGANNNNNNGTTCNNNNNNNNNNNN!	0	
AloI	!NNNNNNNGAACNNNNNNNTCC	2	1051; 1791
AluI	AG!CT	18	566; 618; 624; 696; 869; 1176; 1379; 1520; 1687; 1944; 2239; 2527; 2847; 3305; 4102; 4359; 4405; 4495
AluBI	AG!CT	18	566; 618; 624; 696; 869; 1176; 1379; 1520; 1687; 1944; 2239; 2527; 2847; 3305; 4102; 4359; 4405; 4495
AlwI	GGATCNNNN!	9	668; 970; 2609; 2920; 3166; 3558; 3917; 4015; 4101
AlwI	!NNNNNGATCC	7	580; 655; 1217; 2985; 3529; 3916; 4013
Alw21I	GWGCW!C	5	620; 766; 2854; 3044; 4349
Alw26I	GTCTCN!	1	434
Alw26I	!NNNNNGAGAC	5	1303; 2165; 2583; 3602; 3730
Alw44I	G!TGCAC	2	762; 4345
AlwNI	CAGNN!CTG	3	1349; 3842; 4250
Ama87I	C!YCGRG	2	613; 656
Aor13HI	T!CCGGA	0	
Aor51HI	AG!GCT	1	596
ApaI	GGGCC!C	1	657
ApaBI	GCANNNNN!TGC	3	2309; 2381; 3843
ApaLI	G!TGCAC	2	762; 4345
ApeKI	G!CWGC	16	881; 1025; 1323; 1517; 2036; 2701; 2802; 2844; 2885; 2978; 3365; 3818; 4044; 4250; 4253; 4318
ApoI	R!AATTY	4	629; 1555; 1659; 1670
ApyPI	ATCGACNNNNNNNNNNNNNNNNNNNN!	1	3256
ApyPI	!NNNNNNNNNNNNNNNNNNNGTTCGAT	3	3050; 3703; 4541
AquII	GCCGNACNNNNNNNNNNNNNNNNNNNN!	1	3140
AquII	!NNNNNNNNNNNNNNNNNNNGTNCGGC	1	857
AquIII	GAGGAGNNNNNNNNNNNNNNNNNNNN!	1	2569
AquIII	!NNNNNNNNNNNNNNNNNNNCTCCTC	0	
AquIV	GRGGAAGNNNNNNNNNNNNNNNNNNNN!	0	
AquIV	!NNNNNNNNNNNNNNNNNNCTCCYC	1	3311
ArsI	GACNNNNNTTYGNNNNNNNNNNNN!	0	
ArsI	!NNNNNNCRAANNNNNNGTC	0	
ArsI	CRAANNNNNNGTCNNNNNNNNNNNN!	0	
ArsI	!NNNNNNNNGACNNNNNNNTTYG	0	
AscI	GG!CGCGCC	0	
AseI	AT!TAAT	1	7
Asi256I	G!ATC	25	586; 610; 661; 699; 813; 963; 1047; 1223; 1399; 2579; 2583; 2602; 2913; 2991; 3072; 3081; 3159; 3535; 3551; 3910; 3922; 4000; 4008; 4019; 4094
AsiGI	A!CCGGT	1	666
AsiSI	GCGAT!CGC	0	
AspI	GACN!NNGTC	1	2859
Asp700I	GAANN!NNTTC	0	
Asp718I	G!GTACC	1	645
AspA2I	C!CTAGG	2	2563; 3578
AspEI	GACNNN!NNGTC	0	
AspLEI	GCG!C	21	597; 2007; 2015; 2041; 2063; 2072; 2085; 2116; 2735; 2743; 2807; 2844; 3110; 3370; 3546; 3632; 4035; 4144; 4318; 4418; 4485
AspS9I	G!GNCC	12	83; 276; 654; 832; 1075; 1167; 1848; 3257; 3702; 3748; 3806; 3839
AssI	AGT!ACT	0	
AsuII	TT!CGAA	2	627; 3423
AsuC2I	CC!SGG	7	657; 658; 1256; 2745; 2905; 3518; 4282
AsuHPI	GGTGANNNNNNNN!	4	376; 1068; 3812; 3928
AsuHPI	!NNNNNNNTCACC	3	957; 1858; 2919
AsuNHI	G!CTAGC	1	591
AvaI	C!YCGRG	2	613; 656
AvaII	G!GWCC	2	3257; 3702
AviII	TGC!GCA	1	2843
AvrII	C!CTAGG	2	2563; 3578

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
AxyI	CC!TNAGG	3	941; 2221; 3853
BaeI	ACNNNNGTAYCNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNGRTACNNNNNGT	0	
BaeI	GRTACNNNNGTNNNNNNNNNNNNNN!	0	
BaeI	!NNNNNNNNNNACNNNNNGTAYC	0	
BaeGI	GKGCMI:C	8	657; 739; 766; 799; 1376; 2687; 2780; 4349
BalI	TGG!CCA	2	1342; 2823
BamHI	G!GATCC	1	660
BanI	G!GYRCC	7	465; 645; 736; 796; 1894; 2740; 2775
BanII	GRGCY!C	5	620; 657; 1932; 3106; 3816
BanIII	AT!CGAT	1	2581
BarI	GAAGNNNNNTACNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGTANNNNNNNCTTC	0	
BarI	GTANNNNNNCTTCNNNNNNNNNNNN!	0	
BarI	!NNNNNNNGAAGNNNNNNNTAC	0	
BasI	CCANNNN!NTGG	0	
BauI	C!ACGAG	3	1327; 3459; 4486
BauI	C!TCGTG	2	1177; 3333
BbeI	GGCGC!C	1	2744
Bbr7I	GAAGACNNNNNNNN!	1	988
Bbr7I	!NNNNNNNNNNNGTCTTC	0	
BbrPI	CAC!GTG	0	
BbsI	GAAGACNN!	1	983
BbsI	!NNNNNNGTCTTC	0	
BbuI	GCATG!C	3	2311; 2383; 3146
BbvI	GCAGCNNNNNNNN!	8	893; 1335; 1529; 2814; 2856; 3377; 3830; 4330
BbvI	!NNNNNNNNNNNGCTGC	7	1012; 2023; 2688; 2872; 2965; 4031; 4237
Bbv12I	GWGCW!C	5	620; 766; 2854; 3044; 4349
BbvCI	CC!TCAGC	0	
BbvCI	GC!TGAGG	0	
BccI	CCATCNNNN!	5	1074; 1871; 2435; 2961; 3463
BccI	!NNNNNGATGG	5	1158; 1326; 1839; 2619; 3047
BceAI	ACGGCNNNNNNNNNNNN!	6	762; 894; 1038; 1089; 3167; 3654
BceAI	!NNNNNNNNNNNNNGCCGT	3	1882; 2700; 4159
Bcefl	ACGGCNNNNNNNNNNNN!	6	762; 894; 1038; 1089; 3167; 3654
Bcefl	!NNNNNNNNNNNNNGCCGT	3	1883; 2701; 4160
BcgI	CGANNNNNNTGCNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNGCANNNNNNTCG	0	
BcgI	GCANNNNNNTCGNNNNNNNNNNNN!	0	
BcgI	!NNNNNNNNNNNCGANNNNNNTGC	0	
BciVI	GTATCCNNNNNN!	3	2170; 2960; 4461
BciVI	!NNNNNGGATAC	0	
BclI	T!GATCA	0	
BcnI	CC!SGG	7	657; 658; 1256; 2745; 2905; 3518; 4282
BcuI	A!CTAGT	0	
BdaI	TGANNNNNNTCANNNNNNNNNNN!	1	4594
BdaI	!NNNNNNNNNNNTGANNNNNNTCA	1	4560
BfaI	C!TAG	9	592; 1361; 1396; 1590; 2008; 2564; 3579; 3913; 4166
BfiI	ACTGGGNNNNN!	2	1378; 2690
BfiI	!NNNNCCCAGT	2	289; 2442
BfmI	C!TRYAG	4	634; 2076; 4203; 4394
BfoI	RGCGC!Y	5	598; 2008; 2016; 2744; 4419
BfrI	C!TTAAG	1	1623
BfuI	GTATCCNNNNNN!	3	2170; 2960; 4461
BfuI	!NNNNNGGATAC	0	
BfuAI	ACCTGCNNNN!	4	1202; 1364; 3009; 3459
BfuAI	!NNNNNNNNNGCAGGT	1	2628
BfuCI	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
BglI	GCCNNNN!NGGC	5	90; 212; 283; 1151; 2516
BglII	A!GATCT	1	609

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BisI	GC!NGC	35	831; 882; 1026; 1143; 1324; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
BlnI	C!CTAGG	2	2563; 3578
BlpI	GC!TNAGC	1	1380
BlsI	GCN!GC	35	832; 883; 1027; 1144; 1325; 1386; 1389; 1519; 2038; 2060; 2074; 2512; 2651; 2703; 2714; 2804; 2809; 2846; 2887; 2974; 2977; 2980; 3216; 3312; 3353; 3367; 3481; 3820; 3835; 4046; 4252; 4255; 4320; 4463; 4618
BmcAI	AGT!ACT	0	
Bme18I	G!GWCC	2	3257; 3702
Bme1390I	CC!NGG	22	90; 283; 657; 658; 859; 907; 1003; 1256; 1344; 2277; 2332; 2349; 2745; 2905; 3128; 3518; 3707; 3810; 4282; 4500; 4513; 4634
BmeRI	GACNNN!NNGTC	0	
BmeT110I	C!YCGRG	2	613; 656
BmgBI	CAC!GTC	0	
BmgBI	GAC!GTG	0	
BmgT120I	GG!NCC	12	84; 277; 655; 833; 1076; 1168; 1849; 3258; 3703; 3749; 3807; 3840
BmiI	GGN!NCC	19	467; 647; 655; 662; 738; 798; 1896; 1917; 1929; 2120; 2281; 2353; 2742; 2777; 3625; 3704; 3749; 4592; 4631
BmrI	ACTGGGNNNNN!	2	1378; 2690
BmrI	!NNNNCCCAGT	2	289; 2442
BmrFI	CC!NGG	22	90; 283; 657; 658; 859; 907; 1003; 1256; 1344; 2277; 2332; 2349; 2745; 2905; 3128; 3518; 3707; 3810; 4282; 4500; 4513; 4634
BmsI	GCATCNNNNN!	7	920; 1557; 2320; 2392; 3040; 3104; 3379
BmsI	!NNNNNNNNNGATGC	8	357; 1073; 1112; 1241; 2699; 2954; 3170; 4562
BmtI	GCTAG!C	1	595
BmuI	ACTGGGNNNNN!	2	1378; 2690
BmuI	!NNNNCCCAGT	2	289; 2442
BoxI	GACNN!NNGTC	1	1315
BpiI	GAAGACNN!	1	983
BpiI	!NNNNNNGTCTTC	0	
BpI	GAGNNNNNCTCNNNNNNNNNNNN!	3	717; 2530; 3429
BpI	!NNNNNNNGAGNNNNNCTC	3	685; 2498; 3397
BpmI	CTGGAGNNNNNNNNNNNNNNNN!	1	3581
BpmI	!NNNNNNNNNNNNNNCTCCAG	2	1000; 3524
Bpu10I	CC!TNAGC	0	
Bpu10I	GC!TNAGG	0	
Bpu14I	TT!CGAA	2	627; 3423
Bpu1102I	GC!TNAGC	1	1380
BpuAI	GAAGACNN!	1	983
BpuAI	!NNNNNNGTCTTC	0	
BpuEI	CTTGAGNNNNNNNNNNNNNNNN!	2	4035; 4574
BpuEI	!NNNNNNNNNNNNNNCTCAAG	5	604; 1192; 1231; 3117; 4276
BpuMI	CC!SGG	7	657; 658; 1256; 2745; 2905; 3518; 4282
BpvUI	CGAT!CG	0	
BsaI	GGTCTCN!	0	
BsaI	!NNNNNGAGACC	2	1303; 3730
Bsa29I	AT!CGAT	1	2581
BsaAI	YAC!GTR	3	340; 1857; 3045
BsaBI	GATNN!NNATC	2	1403; 2600
BsaHI	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
BsaJI	C!CNNGG	22	360; 649; 656; 677; 770; 905; 906; 1001; 2275; 2347; 2470; 2505; 2514; 2563; 2904; 3173; 3578; 3705; 3706; 3808; 3809; 4499
BsaMI	GAATGCN!	1	1492
BsaMI	G!CATTC	1	1585
BsaWI	W!CCGGW	6	600; 666; 2772; 3616; 4306; 4453
BsaXI	ACNNNNNCTCCNNNNNNNNNN!	1	1821
BsaXI	!NNNNNNNGGAGNNNNNNGT	0	
BsaXI	GGAGNNNNNGTNNNNNNNNNN!	0	
BsaXI	!NNNNNNNNNACNNNNNCTCC	1	1791

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsbI	CAACACNNNNNNNNNNNNNNNNNNNN!	0	
BsbI	!NNNNNNNNNNNNNNNNNNNGTGTG	2	1742; 3649
Bsc4I	CCNNNNN!NNGG	19	49; 793; 906; 1072; 1753; 2079; 2471; 2722; 3266; 3547; 3579; 3711; 3746; 3796; 3828; 4181; 4460; 4626; 4644
BscAI	GCATCNNNN!	7	919; 1556; 2319; 2391; 3039; 3103; 3378
BscAI	!NNNNNNGATGC	8	360; 1076; 1115; 1244; 2702; 2957; 3173; 4565
Bse1I	ACTGGN!	5	1286; 1373; 2685; 2886; 4132
Bse1I	C!CAGT	5	295; 1770; 2448; 4244; 4257
Bse8I	GATNN!NNATC	2	1403; 2600
Bse21I	CC!TNAGG	3	941; 2221; 3853
Bse118I	R!CCGGY	5	666; 1958; 3060; 3241; 3524
BseAI	T!CCGGA	0	
BseBI	CC!WGG	15	90; 283; 859; 907; 1003; 1344; 2277; 2332; 2349; 3128; 3707; 3810; 4500; 4513; 4634
BseCI	AT!CGAT	1	2581
BseDI	C!CNNGG	22	360; 649; 656; 677; 770; 905; 906; 1001; 2275; 2347; 2470; 2505; 2514; 2563; 2904; 3173; 3578; 3705; 3706; 3808; 3809; 4499
Bse3DI	GCAATGNN!	1	2974
Bse3DI	!CATTGC	0	
BseGI	GGATGNN!	4	2601; 3058; 3083; 3537
BseGI	!CATCC	5	766; 854; 911; 1066; 2427
BseJI	GATNN!NNATC	2	1403; 2600
BseLI	CCNNNNN!NNGG	19	49; 793; 906; 1072; 1753; 2079; 2471; 2722; 3266; 3547; 3579; 3711; 3746; 3796; 3828; 4181; 4460; 4626; 4644
BseMI	GCAATGNN!	1	2974
BseMI	!CATTGC	0	
BseMII	CTCAGNNNNNNNNNN!	2	620; 3867
BseMII	!NNNNNNNNCTGAG	8	932; 1138; 1371; 2212; 2514; 3395; 3967; 4376
BseNI	ACTGGN!	5	1286; 1373; 2685; 2886; 4132
BseNI	C!CAGT	5	295; 1770; 2448; 4244; 4257
BsePI	G!CGCGC	0	
BseRI	GAGGAGNNNNNNNNNN!	1	2559
BseRI	!NNNNNNNNCTCCTC	0	
BseSI	GKGCMI!C	8	657; 739; 766; 799; 1376; 2687; 2780; 4349
BseXI	GCAGCNNNNNNNN!	8	893; 1335; 1529; 2814; 2856; 3377; 3830; 4330
BseXI	!NNNNNNNNNNNGCTGC	7	1012; 2023; 2688; 2872; 2965; 4031; 4237
BseX3I	C!GGCCG	2	1385; 2647
BseYI	C!CCAGC	3	2284; 2356; 4355
BseYI	G!CTGGG	2	1103; 3245
BsgI	GTGCAGNNNNNNNNNNNNNN!	0	
BsgI	!NNNNNNNNNNNNNNCTGCAC	1	1180
Bsh1236I	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
Bsh1285I	CGRY!CG	4	671; 1388; 2650; 4325
BshFI	GG!CC	30	84; 277; 655; 749; 833; 1076; 1111; 1145; 1154; 1168; 1300; 1342; 1387; 1707; 1849; 2504; 2510; 2519; 2562; 2649; 2823; 3214; 3241; 3750; 3807; 3840; 4185; 4619; 4637; 4648
BshNI	G!GYRCC	7	465; 645; 736; 796; 1894; 2740; 2775
BshTI	A!CCGGT	1	666
BshVI	AT!CGAT	1	2581
BsiEI	CGRY!CG	4	671; 1388; 2650; 4325
BsiHKAI	GWGCW!C	5	620; 766; 2854; 3044; 4349
BsiHKCI	C!YCGRG	2	613; 656
BsiSI	C!CGG	20	601; 657; 667; 1256; 1959; 2646; 2723; 2745; 2773; 2904; 2994; 3061; 3242; 3517; 3525; 3617; 4091; 4281; 4307; 4454
BsiWI	C!GTACG	0	
BslI	CCNNNNN!NNGG	19	49; 793; 906; 1072; 1753; 2079; 2471; 2722; 3266; 3547; 3579; 3711; 3746; 3796; 3828; 4181; 4460; 4626; 4644
BslFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2892; 3424; 3533
BslFI	!NNNNNNNNNNNNNGTCCC	4	2257; 2329; 2393; 3688
BsmI	GAATGCN!	1	1492
BsmI	G!CATTC	1	1585
BsmAI	GTCTCN!	1	434
BsmAI	!NNNNNGAGAC	5	1303; 2165; 2583; 3602; 3730
BsmBI	CGTCTCN!	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BsmBI	!NNNNNGAGACG	0	
BsmFI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2892; 3424; 3533
BsmFI	!NNNNNNNNNNNNNGTCCC	4	2257; 2329; 2393; 3688
BsnI	GG!CC	30	84; 277; 655; 749; 833; 1076; 1111; 1145; 1154; 1168; 1300; 1342; 1387; 1707; 1849; 2504; 2510; 2519; 2562; 2649; 2823; 3214; 3241; 3750; 3807; 3840; 4185; 4619; 4637; 4648
Bso31I	GGTCTCN!	0	
Bso31I	!NNNNNGAGACC	2	1303; 3730
BsoBI	C!YCGRG	2	613; 656
Bsp13I	T!CCGGA	0	
Bsp19I	C!CATGG	4	360; 677; 2470; 3173
Bsp24I	GACNNNNNTGGNNNNNNNNNN!	2	289; 3544
Bsp24I	!NNNNNNCCANNNNNGTC	2	3965; 4143
Bsp24I	CCANNNNNGTCNNNNNNNNNNNN!	2	3997; 4175
Bsp24I	!NNNNNNNGACNNNNNTGG	2	257; 3512
Bsp68I	TCG!CGA	0	
Bsp119I	TT!CGAA	2	627; 3423
Bsp120I	G!GGCCC	1	653
Bsp143I	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
Bsp1286I	GDGCH!C	14	620; 657; 739; 766; 799; 1376; 1932; 2687; 2780; 2854; 3044; 3106; 3816; 4349
Bsp1407I	T!GTACA	1	725
Bsp1720I	GC!TNAGC	1	1380
BspACI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 806; 995; 1133; 1235; 1388; 2056; 2059; 2073; 2163; 2411; 2423; 2432; 2444; 2454; 2465; 2511; 2650; 2713; 3215; 3260; 3326; 3352; 3477; 3480; 3628; 3760; 4067; 4211; 4707
BspACI	G!CGG	28	370; 403; 528; 651; 830; 1142; 1184; 1384; 2001; 2028; 2116; 2226; 2807; 2871; 2972; 2975; 3255; 3310; 3408; 3546; 3693; 3833; 4076; 4321; 4442; 4461; 4588; 4616
BspCNI	CTCAGNNNNNNNN!	2	619; 3866
BspCNI	!NNNNNNCTGAG	8	933; 1139; 1372; 2213; 2515; 3396; 3968; 4377
BspDI	AT!CGAT	1	2581
BspD6I	GACTCNNNN!	6	418; 612; 1400; 1814; 3420; 4297
BspD6I	!NNNNNGAGTC	2	1777; 2209
BspEI	T!CCGGA	0	
BspFNI	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
BspHI	T!CATGA	2	2167; 3939
BspLI	GGN!NCC	19	467; 647; 655; 662; 738; 798; 1896; 1917; 1929; 2120; 2281; 2353; 2742; 2777; 3625; 3704; 3749; 4592; 4631
BspMI	ACCTGCNNNN!	4	1202; 1364; 3009; 3459
BspMI	!NNNNNNNGCAGGT	1	2628
BspOI	GCTAG!C	1	595
BspPI	GGATCNNNN!	9	668; 970; 2609; 2920; 3166; 3558; 3917; 4015; 4101
BspPI	!NNNNNGATCC	7	580; 655; 1217; 2985; 3529; 3916; 4013
BspQI	GCTCTCN!	0	
BspQI	!NNNNGAAGAGC	2	3085; 3295
BspTI	C!TTAAG	1	1623
BspT104I	TT!CGAA	2	627; 3423
BspT107I	G!GYRCC	7	465; 645; 736; 796; 1894; 2740; 2775
BspTNI	GGTCTCN!	0	
BspTNI	!NNNNNGAGACC	2	1303; 3730
BsrI	ACTGGN!	5	1286; 1373; 2685; 2886; 4132
BsrI	C!CAGT	5	295; 1770; 2448; 4244; 4257
BsrBI	CCG!CTC	2	2165; 3354
BsrBI	GAG!CGG	3	1384; 2001; 3408
BsrDI	GCAATGNN!	1	2974
BsrDI	!CATTGC	0	
BsrFI	R!CCGGY	5	666; 1958; 3060; 3241; 3524
BsrGI	T!GTACA	1	725
BsrSI	ACTGGN!	5	1286; 1373; 2685; 2886; 4132
BsrSI	C!CAGT	5	295; 1770; 2448; 4244; 4257
BssAI	R!CCGGY	5	666; 1958; 3060; 3241; 3524

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BssECI	C!CNGGG	22	360; 649; 656; 677; 770; 905; 906; 1001; 2275; 2347; 2470; 2505; 2514; 2563; 2904; 3173; 3578; 3705; 3706; 3808; 3809; 4499
BssHII	G!CGCGC	0	
BssKI	!CCNGG	22	88; 281; 655; 656; 857; 905; 1001; 1254; 1342; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
BssMI	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
BssNI	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
BssNAI	GTA!TAC	0	
BssSI	C!ACGAG	3	1327; 3459; 4486
BssSI	C!TCGTG	2	1177; 3333
BssTII	C!CWWGG	6	360; 677; 2470; 2563; 3173; 3578
Bst6I	CTCTTCN!	0	
Bst6I	!NNNNGAAGAG	3	2208; 3085; 3295
Bst98I	C!TTAAG	1	1623
Bst1107I	GTA!TAC	0	
BstACI	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
BstAFI	C!TTAAG	1	1623
BstAPI	GCANNNN!NTGC	3	2308; 2380; 3842
BstAUI	T!GTACA	1	725
BstBI	TT!CGAA	2	627; 3423
Bst2BI	C!ACGAG	3	1327; 3459; 4486
Bst2BI	C!TCGTG	2	1177; 3333
BstBAI	YAC!GTR	3	340; 1857; 3045
Bst4CI	ACN!GT	16	76; 198; 269; 543; 581; 645; 725; 741; 1832; 3121; 3237; 3345; 3668; 4159; 4629; 4700
BstC8I	GCN!NGC	33	86; 279; 593; 653; 694; 784; 988; 1113; 1960; 2003; 2017; 2290; 2309; 2362; 2381; 2635; 2821; 3040; 3106; 3112; 3140; 3144; 3185; 3189; 3243; 3526; 3713; 3760; 3816; 3838; 4049; 4609; 4646
BstDEI	C!TNAG	12	606; 809; 941; 1147; 1238; 1380; 2221; 2523; 3404; 3853; 3976; 4385
BstDSI	C!CRYGG	5	360; 649; 677; 2470; 3173
BstEII	G!GTNACC	0	
BstENI	CCTNN!NNNAGG	0	
BstF5I	GGATGNN!	4	2601; 3058; 3083; 3537
BstF5I	!CATCC	5	766; 854; 911; 1066; 2427
BstFNI	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
BstH2I	RGCGC!Y	5	598; 2008; 2016; 2744; 4419
BstHHI	GCG!C	21	597; 2007; 2015; 2041; 2063; 2072; 2085; 2116; 2735; 2743; 2807; 2844; 3110; 3370; 3546; 3632; 4035; 4144; 4318; 4418; 4485
BstKTI	GAT!C	25	588; 612; 663; 701; 815; 965; 1049; 1225; 1401; 2581; 2585; 2604; 2915; 2993; 3074; 3083; 3161; 3537; 3553; 3912; 3924; 4002; 4010; 4021; 4096
BstMAI	GTCTCN!	1	434
BstMAI	!NNNNGAGAC	5	1303; 2165; 2583; 3602; 3730
BstMBI	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
BstMCI	CGRY!CG	4	671; 1388; 2650; 4325
BstMWI	GCNNNNN!NNGC	26	90; 212; 244; 283; 376; 400; 1151; 1968; 1998; 2025; 2067; 2308; 2380; 2431; 2510; 2732; 2816; 2839; 2978; 3101; 3184; 3451; 3638; 3842; 4041; 4613
BstNI	CC!WGG	15	90; 283; 859; 907; 1003; 1344; 2277; 2332; 2349; 3128; 3707; 3810; 4500; 4513; 4634
BstNSI	RCATG!Y	5	714; 2311; 2383; 3146; 4663
BstOI	CC!WGG	15	90; 283; 859; 907; 1003; 1344; 2277; 2332; 2349; 3128; 3707; 3810; 4500; 4513; 4634
BstPI	G!GTNACC	0	
BstPAI	GACNN!NNGTC	1	1315
BstSCI	!CCNGG	22	88; 281; 655; 656; 857; 905; 1001; 1254; 1342; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
BstSFI	C!TRYAG	4	634; 2076; 4203; 4394
BstSLI	GKGCMI!C	8	657; 739; 766; 799; 1376; 2687; 2780; 4349
BstSNI	TAC!GTA	1	340
BstUI	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
Bst2UI	CC!WGG	15	90; 283; 859; 907; 1003; 1344; 2277; 2332; 2349; 3128; 3707; 3810; 4500; 4513; 4634
BstV1I	GCAGCNNNNNNNN!	8	893; 1335; 1529; 2814; 2856; 3377; 3830; 4330
BstV1I	!NNNNNNNNNNNGCTGC	7	1012; 2023; 2688; 2872; 2965; 4031; 4237
BstV2I	GAAGACNN!	1	983
BstV2I	!NNNNNNNGTCTTC	0	
BstXI	CCANNNNN!NTGG	0	
BstX2I	R!GATCY	11	585; 609; 660; 1222; 2912; 3158; 3550; 3909; 3921; 4007; 4018
BstYI	R!GATCY	11	585; 609; 660; 1222; 2912; 3158; 3550; 3909; 3921; 4007; 4018
BstZI	C!GGCCG	2	1385; 2647
BstZ17I	GTA!TAC	0	
BsuI	GTATCCNNNNNN!	3	2170; 2960; 4461
BsuI	!NNNNNNGGATAC	0	
Bsu15I	AT!CGAT	1	2581
Bsu36I	CC!TNAGG	3	941; 2221; 3853
BsuRI	GG!CC	30	84; 277; 655; 749; 833; 1076; 1111; 1145; 1154; 1168; 1300; 1342; 1387; 1707; 1849; 2504; 2510; 2519; 2562; 2649; 2823; 3214; 3241; 3750; 3807; 3840; 4185; 4619; 4637; 4648
BsuTUI	AT!CGAT	1	2581
BtgI	C!CRYGG	5	360; 649; 677; 2470; 3173
BtgZI	GCGATGNNNNNNNNNN!	2	1858; 3193
BtgZI	!NNNNNNNNNNNNNNNCATCGC	3	334; 3012; 3356
BthCI	GCNG!C	35	833; 884; 1028; 1145; 1326; 1387; 1390; 1520; 2039; 2061; 2075; 2513; 2652; 2704; 2715; 2805; 2810; 2847; 2888; 2975; 2978; 2981; 3217; 3313; 3354; 3368; 3482; 3821; 3836; 4047; 4253; 4256; 4321; 4464; 4619
BtrI	CAC!GTC	0	
BtrI	GAC!GTG	0	
BtsI	GCAGTGNN!	0	
BtsI	!CACTGC	2	1197; 1580
BtsCI	GGATGNN!	4	2601; 3058; 3083; 3537
BtsCI	!CATCC	5	766; 854; 911; 1066; 2427
BtuMI	TCG!CGA	0	
BveI	ACCTGCNNNN!	4	1202; 1364; 3009; 3459
BveI	!NNNNNNNNGCAGGT	1	2628
Cac8I	GCN!NGC	33	86; 279; 593; 653; 694; 784; 988; 1113; 1960; 2003; 2017; 2290; 2309; 2362; 2381; 2635; 2821; 3040; 3106; 3112; 3140; 3144; 3185; 3189; 3243; 3526; 3713; 3760; 3816; 3838; 4049; 4609; 4646
CaiI	CAGNNN!CTG	3	1349; 3842; 4250
CciI	T!CATGA	2	2167; 3939
CciNI	GC!GGCCGC	1	1385
CdiI	CATC!G	5	352; 3030; 3035; 3233; 3374
CdiI	C!GATG	2	1844; 3179
CdpI	GCGGAGNNNNNNNNNNNNNNNNNNNNNN!	1	4613
CdpI	!NNNNNNNNNNNNNNNNNNNNCTCCGC	3	486; 2402; 2444
CelII	GC!TNAGC	1	1380
CfoI	GCG!C	21	597; 2007; 2015; 2041; 2063; 2072; 2085; 2116; 2735; 2743; 2807; 2844; 3110; 3370; 3546; 3632; 4035; 4144; 4318; 4418; 4485
CfrI	Y!GGCCR	7	747; 1340; 1385; 2647; 2821; 3212; 3239
Cfr9I	C!CCGGG	1	656
Cfr10I	R!CCGGY	5	666; 1958; 3060; 3241; 3524
Cfr13I	G!GNCC	12	83; 276; 654; 832; 1075; 1167; 1848; 3257; 3702; 3748; 3806; 3839
Cfr42I	CCGC!GG	1	652
ChaI	GATC!	25	589; 613; 664; 702; 816; 966; 1050; 1226; 1402; 2582; 2586; 2605; 2916; 2994; 3075; 3084; 3162; 3538; 3554; 3913; 3925; 4003; 4011; 4022; 4097
CjeI	CCANNNNNNGTNNNNNNNNNNNNNNNN!	5	778; 2558; 3998; 4098; 4176
CjeI	!NNNNNNNNNACNNNNNNNTGG	8	64; 257; 713; 2225; 2320; 3512; 4062; 4617
CjeI	ACNNNNNNNTGGNNNNNNNNNNNNNN!	8	98; 291; 747; 2259; 2354; 3546; 4096; 4651

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
CjeI	!NNNNNNNNCCANNNNNNNGT	5	744; 2524; 3964; 4064; 4142
CjePI	CCANNNNNNNTCANNNNNNNNNNNN!	2	3998; 4176
CjePI	!NNNNNNNNGANNNNNNNTGG	3	257; 3512; 4111
CjePI	GANNNNNNNTGGNNNNNNNNNNNN!	3	290; 3545; 4144
CjePI	!NNNNNNCCANNNNNNNTC	2	3965; 4143
Clal	AT!CGAT	1	2581
CpoI	CG!GWCCG	1	3257
CseI	GACGCNNNNN!	3	526; 3451; 3530
CseI	!NNNNNNNNNGCGTC	3	2074; 3969; 4547
CsiI	A!CCWGGT	1	2330
Cspi	CG!GWCCG	1	3257
Csp6I	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 726; 876; 1128; 1347; 3046
Csp45I	TT!CGAA	2	627; 3423
CspAI	A!CCGGT	1	666
CspCI	CAANNNNNGTGGNNNNNNNNNNNN!	1	411
CspCI	!NNNNNNNNCCACNNNNNTTG	0	
CspCI	CCACNNNNNTTGGNNNNNNNNNNNN!	0	
CspCI	!NNNNNNNNNCAANNNNNGTGG	1	376
CstMI	AAGGAGNNNNNNNNNNNNNNNNNN!	3	1319; 2021; 3630
CstMI	!NNNNNNNNNNNNNNNNNCTCCTT	0	
CviAII	C!ATG	21	301; 361; 678; 711; 717; 729; 873; 953; 2168; 2308; 2380; 2471; 2612; 2957; 3143; 3174; 3200; 3556; 3940; 4660; 4711
CviJI	RG!CY	97	42; 84; 93; 277; 566; 618; 624; 655; 696; 749; 786; 833; 862; 869; 947; 1013; 1025; 1076; 1103; 1111; 1145; 1154; 1168; 1176; 1190; 1259; 1300; 1336; 1342; 1379; 1387; 1410; 1520; 1687; 1707; 1849; 1930; 1944; 1958; 2239; 2280; 2352; 2475; 2504; 2510; 2519; 2527; 2550; 2562; 2568; 2649; 2666; 2674; 2701; 2726; 2810; 2819; 2823; 2847; 2885; 2961; 2978; 2997; 3060; 3104; 3114; 3131; 3214; 3241; 3245; 3282; 3305; 3321; 3501; 3528; 3589; 3711; 3750; 3807; 3814; 3821; 3840; 3851; 4102; 4131; 4174; 4185; 4250; 4329; 4354; 4359; 4405; 4495; 4593; 4619; 4637; 4648
CviKI-1	RG!CY	97	42; 84; 93; 277; 566; 618; 624; 655; 696; 749; 786; 833; 862; 869; 947; 1013; 1025; 1076; 1103; 1111; 1145; 1154; 1168; 1176; 1190; 1259; 1300; 1336; 1342; 1379; 1387; 1410; 1520; 1687; 1707; 1849; 1930; 1944; 1958; 2239; 2280; 2352; 2475; 2504; 2510; 2519; 2527; 2550; 2562; 2568; 2649; 2666; 2674; 2701; 2726; 2810; 2819; 2823; 2847; 2885; 2961; 2978; 2997; 3060; 3104; 3114; 3131; 3214; 3241; 3245; 3282; 3305; 3321; 3501; 3528; 3589; 3711; 3750; 3807; 3814; 3821; 3840; 3851; 4102; 4131; 4174; 4185; 4250; 4329; 4354; 4359; 4405; 4495; 4593; 4619; 4637; 4648
CviQI	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 726; 876; 1128; 1347; 3046
DdeI	C!TNAG	12	606; 809; 941; 1147; 1238; 1380; 2221; 2523; 3404; 3853; 3976; 4385
DinI	GGC!GCC	1	2742
DpnI	GA!TC	25	587; 611; 662; 700; 814; 964; 1048; 1224; 1400; 2580; 2584; 2603; 2914; 2992; 3073; 3082; 3160; 3536; 3552; 3911; 3923; 4001; 4009; 4020; 4095
DpnII	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
DraI	TTT!AAA	3	1443; 3885; 3904
DraII	RG!GNCCY	1	3839
DraIII	CACNNN!GTG	1	1857
DraRI	CAAGNACNNNNNNNNNNNNNNNNNN!	2	266; 4221
DraRI	!NNNNNNNNNNNNNNNNNGTNCCTT	0	
DrdI	GACNNN!NNGTC	3	1812; 2768; 4557
DrdIV	TACGACNNNNNNNNNNNNNNNNNN!	0	
DrdIV	!NNNNNNNNNNNNNNNNNGTCGTA	1	476
DriI	GACNNN!NNGTC	0	
DseDI	GACNNN!NNGTC	3	1812; 2768; 4557
EaeI	Y!GGCCR	7	747; 1340; 1385; 2647; 2821; 3212; 3239
EagI	C!GGCCG	2	1385; 2647
Eam1104I	CTCTCN!	0	
Eam1104I	!NNNGAAGAG	3	2208; 3085; 3295

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Eam1105I	GACNNN!NNGTC	0	
EarI	CTCTCN!	0	
EarI	!NNNNGAAGAG	3	2208; 3085; 3295
EciI	GGCGGANNNNNNNNNN!	4	2241; 3270; 4457; 4603
EciI	!NNNNNNNNNTCCGCC	4	496; 2412; 2433; 2454
Ecl136II	GAG!CTC	1	618
EclXI	C!GGCCG	2	1385; 2647
Eco24I	GRGCY!C	5	620; 657; 1932; 3106; 3816
Eco31I	GGTCTCN!	0	
Eco31I	!NNNNNGAGACC	2	1303; 3730
Eco32I	GAT!ATC	0	
Eco47I	G!GWCC	2	3257; 3702
Eco47III	AGC!GCT	1	596
Eco52I	C!GGCCG	2	1385; 2647
Eco57I	CTGAAGNNNNNNNNNNNN!	3	1192; 2887; 3319
Eco57I	!NNNNNNNNNNNNNCTTCAG	1	4117
Eco72I	CAC!GTG	0	
Eco81I	CC!TNAGG	3	941; 2221; 3853
Eco88I	C!YCGRG	2	613; 656
Eco91I	G!GTNACC	0	
Eco105I	TAC!GTA	1	340
Eco130I	C!CWWGG	6	360; 677; 2470; 2563; 3173; 3578
Eco147I	AGG!CCT	1	2562
EcoHI	!CCSGG	7	655; 656; 1254; 2743; 2903; 3516; 4280
EcoICRI	GAG!CTC	1	618
Eco57MI	CTGRAGNNNNNNNNNNNN!	4	1192; 2887; 3319; 3581
Eco57MI	!NNNNNNNNNNNNNCTYCAG	3	1000; 3524; 4117
EcoNI	CCTNN!NNNAGG	0	
Eco065I	G!GTNACC	0	
Eco0109I	RG!GNCCY	1	3839
EcoRI	G!AATTC	1	629
EcoRII	!CCWGG	15	88; 281; 857; 905; 1001; 1342; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
EcoRV	GAT!ATC	0	
EcoT14I	C!CWWGG	6	360; 677; 2470; 2563; 3173; 3578
EcoT22I	ATGCA!T	3	2313; 2385; 4716
EcoT38I	GRGCY!C	5	620; 657; 1932; 3106; 3816
Eco53kl	GAG!CTC	1	618
EgeI	GGC!GCC	1	2742
EheI	GGC!GCC	1	2742
ErhI	C!CWWGG	6	360; 677; 2470; 2563; 3173; 3578
EsaBC3I	TC!GA	17	615; 628; 641; 825; 852; 1320; 1891; 2582; 2855; 3011; 3035; 3071; 3233; 3424; 3469; 3724; 4562
Esp3I	CGTCTCN!	0	
Esp3I	!NNNNNGAGACG	0	
FaeI	CATG!	21	304; 364; 681; 714; 720; 732; 876; 956; 2171; 2311; 2383; 2474; 2615; 2960; 3146; 3177; 3203; 3559; 3943; 4663; 4714
FaiI	YA!TR	60	39; 46; 50; 67; 138; 146; 234; 236; 291; 302; 310; 362; 555; 557; 679; 712; 718; 730; 874; 954; 972; 1157; 1218; 1403; 1413; 1479; 1524; 1729; 2157; 2169; 2300; 2309; 2372; 2381; 2405; 2472; 2496; 2613; 2677; 2958; 2983; 3144; 3175; 3201; 3273; 3489; 3557; 3635; 3687; 3848; 3865; 3867; 3869; 3941; 4219; 4408; 4524; 4597; 4661; 4712
FalI	AAGNNNNNCTNNNNNNNNNN!	2	951; 3081
FalI	!NNNNNNNNAAGNNNNNCTT	2	919; 3049
FaqI	GGGACNNNNNNNNNN!	6	175; 326; 494; 2892; 3424; 3533
FaqI	!NNNNNNNNNNNNNGTCCC	4	2257; 2329; 2393; 3688
FatI	!CATG	21	300; 360; 677; 710; 716; 728; 872; 952; 2167; 2307; 2379; 2470; 2611; 2956; 3142; 3173; 3199; 3555; 3939; 4659; 4710
FauI	CCCGCNNNN!	10	93; 119; 286; 1140; 1242; 2063; 2418; 2439; 3635; 3767
FauI	!NNNNNGCGGG	7	644; 1177; 1994; 2864; 3401; 3539; 3686
FauNDI	CA!TATG	1	234
FbaI	T!GATCA	0	
FblI	GT!MKAC	1	640
FmuI	GGNC!C	12	86; 279; 657; 835; 1078; 1170; 1851; 3260; 3705; 3751; 3809; 3842

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
Fnu4HI	GC!NGC	35	831; 882; 1026; 1143; 1324; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
FokI	GGATGNNNNNNNNNN!	4	2608; 3065; 3090; 3544
FokI	!NNNNNNNNNNNNNNCATCC	5	753; 841; 898; 1053; 2414
FriOI	GRGCY!C	5	620; 657; 1932; 3106; 3816
FseI	GGCCGG!CC	0	
FspI	TGC!GCA	1	2843
FspAI	RTGC!GCAY	0	
FspBI	C!TAG	9	592; 1361; 1396; 1590; 2008; 2564; 3579; 3913; 4166
FspEI	CCNNNNNNNNNNNN!	157	56; 71; 98; 114; 128; 129; 156; 182; 220; 252; 291; 307; 333; 373; 450; 451; 482; 501; 520; 593; 614; 662; 677; 717; 753; 783; 800; 814; 847; 861; 879; 903; 918; 948; 981; 1008; 1023; 1042; 1078; 1125; 1144; 1159; 1182; 1207; 1227; 1247; 1268; 1314; 1356; 1373; 1401; 1424; 1463; 1477; 1618; 1713; 1737; 1760; 1783; 1801; 1823; 1844; 1863; 1882; 1911; 1932; 1946; 1972; 2060; 2086; 2135; 2176; 2194; 2233; 2249; 2287; 2344; 2359; 2416; 2436; 2450; 2467; 2481; 2518; 2533; 2576; 2659; 2726; 2757; 2777; 2792; 2837; 2851; 2917; 2931; 2950; 2966; 3007; 3027; 3074; 3124; 3140; 3160; 3185; 3205; 3228; 3255; 3273; 3299; 3339; 3365; 3389; 3445; 3459; 3487; 3530; 3551; 3586; 3630; 3718; 3742; 3764; 3784; 3800; 3821; 3835; 3854; 3938; 3958; 3986; 4001; 4035; 4077; 4104; 4119; 4164; 4188; 4202; 4224; 4250; 4270; 4294; 4320; 4368; 4387; 4406; 4432; 4467; 4512; 4542; 4556; 4607; 4621; 4646; 4662; 4683; 4712
FspEI	!NNNNNNNNNNNNNNNGG	129	8; 35; 59; 144; 166; 197; 252; 295; 347; 375; 400; 435; 463; 509; 529; 552; 586; 628; 652; 670; 715; 757; 778; 802; 844; 863; 892; 928; 965; 988; 1007; 1037; 1058; 1085; 1127; 1150; 1169; 1241; 1260; 1279; 1318; 1354; 1412; 1512; 1581; 1611; 1689; 1738; 1760; 1788; 1824; 1869; 1898; 1934; 1953; 1981; 2001; 2064; 2087; 2195; 2227; 2245; 2274; 2317; 2346; 2457; 2486; 2529; 2550; 2578; 2611; 2631; 2656; 2683; 2708; 2730; 2758; 2784; 2805; 2856; 2877; 2895; 2943; 2979; 3035; 3060; 3084; 3113; 3136; 3160; 3186; 3208; 3227; 3252; 3292; 3328; 3393; 3478; 3502; 3531; 3565; 3586; 3606; 3651; 3678; 3697; 3730; 3782; 3813; 3840; 3892; 3990; 4061; 4106; 4167; 4232; 4266; 4292; 4310; 4346; 4416; 4439; 4461; 4485; 4518; 4566; 4601; 4619; 4676
Fsp4HI	GC!NGC	35	831; 882; 1026; 1143; 1324; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
GdiII	C!GGCCR	3	747; 1385; 2647
GdiII	Y!GGCCG	4	1385; 2647; 3212; 3239
GlaI	GC!GC	21	596; 2006; 2014; 2040; 2062; 2071; 2084; 2115; 2734; 2742; 2806; 2843; 3109; 3369; 3545; 3631; 4034; 4143; 4317; 4417; 4484
GluI	GC!NGC	35	831; 882; 1026; 1143; 1324; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
GsaI	CCCAG!C	3	2288; 2360; 4359
GsaI	GCTGG!G	2	1107; 3249
GsuI	CTGGAGNNNNNNNNNNNNNNNN!	1	3581
GsuI	!NNNNNNNNNNNNNNCTCCAG	2	1000; 3524
HaeI	WGG!CCW	8	1111; 1154; 1342; 2562; 2823; 4185; 4637; 4648
HaeII	RGCGC!Y	5	598; 2008; 2016; 2744; 4419
HaeIII	GG!CC	30	84; 277; 655; 749; 833; 1076; 1111; 1145; 1154; 1168; 1300; 1342; 1387; 1707; 1849; 2504; 2510; 2519; 2562; 2649; 2823; 3214; 3241; 3750; 3807; 3840; 4185; 4619; 4637; 4648
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1416; 2937
HaeIV	!NNNNNNNNNGAYNNNNNNRTC	2	1382; 2903
HaeIV	GAYNNNNNRTCNNNNNNNNNNNNNN!	2	1415; 2936
HaeIV	!NNNNNNNGAYNNNNNNRTC	2	1384; 2905
HapII	C!CGG	20	601; 657; 667; 1256; 1959; 2646; 2723; 2745; 2773; 2904; 2994; 3061; 3242; 3517; 3525; 3617; 4091; 4281; 4307; 4454
HgaI	GACGCNNNNN!	3	526; 3451; 3530
HgaI	!NNNNNNNNNGCGTC	3	2074; 3969; 4547

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
HhaI	GCG!C	21	597; 2007; 2015; 2041; 2063; 2072; 2085; 2116; 2735; 2743; 2807; 2844; 3110; 3370; 3546; 3632; 4035; 4144; 4318; 4418; 4485
Hin1I	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
Hin1II	CATG!	21	304; 364; 681; 714; 720; 732; 876; 956; 2171; 2311; 2383; 2474; 2615; 2960; 3146; 3177; 3203; 3559; 3943; 4663; 4714
Hin4I	GAYNNNNNVTCNNNNNNNNNNNN!	2	1415; 2936
Hin4I	!NNNNNNNNGABNNNNNRTC	3	1383; 2904; 2934
Hin4I	GABNNNNNRTCNNNNNNNNNNNN!	3	1415; 2936; 2966
Hin4I	!NNNNNNNNGAYNNNNNVTC	2	1383; 2904
Hin6I	G!CGC	21	595; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
HinP1I	G!CGC	21	595; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
HincII	GTY!RAC	2	641; 1504
HindII	GTY!RAC	2	641; 1504
HindIII	A!AGCTT	1	622
HinfI	G!ANTC	14	410; 604; 1289; 1392; 1784; 1806; 2216; 3226; 3360; 3412; 3470; 3507; 4289; 4685
HpaI	GTT!AAC	1	1504
HpaII	C!CGG	20	601; 657; 667; 1256; 1959; 2646; 2723; 2745; 2773; 2904; 2994; 3061; 3242; 3517; 3525; 3617; 4091; 4281; 4307; 4454
HphI	GGTGANNNNNNNN!	4	376; 1068; 3812; 3928
HphI	!NNNNNNNTCACC	3	957; 1858; 2919
Hpy8I	GTN!NAC	13	201; 539; 577; 641; 744; 764; 1059; 1272; 1504; 1788; 1805; 1860; 4347
Hpy99I	CGWCG!	9	645; 1321; 2831; 2859; 3153; 3168; 3445; 3830; 4563
Hpy166II	GTN!NAC	13	201; 539; 577; 641; 744; 764; 1059; 1272; 1504; 1788; 1805; 1860; 4347
Hpy188I	TCN!GA	15	585; 609; 705; 771; 1163; 1915; 2524; 2708; 3052; 3405; 3506; 3985; 4119; 4472; 4550
Hpy188III	TC!NNGA	25	613; 1017; 1044; 1209; 1248; 1396; 2168; 2220; 2533; 2586; 2759; 3075; 3084; 3167; 3223; 3267; 3357; 3390; 3459; 3940; 4014; 4097; 4195; 4293; 4427
HpyAV	CCTTCNNNNNN!	5	852; 945; 3386; 3493; 4172
HpyAV	!NNNNNGAAGG	8	772; 1974; 2869; 3598; 3614; 3797; 4114; 4424
HpyCH4III	ACN!GT	16	76; 198; 269; 543; 581; 645; 725; 741; 1832; 3121; 3237; 3345; 3668; 4159; 4629; 4700
HpyCH4IV	A!CGT	16	122; 134; 175; 258; 339; 444; 1040; 1316; 1801; 1813; 1856; 1966; 2857; 3044; 3825; 3958
HpyCH4V	TG!CA	21	636; 714; 764; 1086; 1197; 1490; 1517; 1585; 2302; 2311; 2374; 2383; 2498; 2574; 2633; 2792; 2967; 2981; 4051; 4347; 4714
HpyF3I	C!TNAG	12	606; 809; 941; 1147; 1238; 1380; 2221; 2523; 3404; 3853; 3976; 4385
HpyF10VI	GCNNNNN!NNGC	26	90; 212; 244; 283; 376; 400; 1151; 1968; 1998; 2025; 2067; 2308; 2380; 2431; 2510; 2732; 2816; 2839; 2978; 3101; 3184; 3451; 3638; 3842; 4041; 4613
Hsp92I	GR!CGYC	7	122; 175; 258; 444; 2741; 3443; 3522
Hsp92II	CATG!	21	304; 364; 681; 714; 720; 732; 876; 956; 2171; 2311; 2383; 2474; 2615; 2960; 3146; 3177; 3203; 3559; 3943; 4663; 4714
HspAI	G!CGC	21	595; 2005; 2013; 2039; 2061; 2070; 2083; 2114; 2733; 2741; 2805; 2842; 3108; 3368; 3544; 3630; 4033; 4142; 4316; 4416; 4483
KasI	G!GCGCC	1	2740
KfiI	GG!GWCCC	0	
KpnI	GGTAC!C	1	649
Kpn2I	T!CCGGA	0	
KspI	CCGC!GG	1	652
Ksp22I	T!GATCA	0	
KspAI	GTT!AAC	1	1504
Kzo9I	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
LguI	GCTCTCN!	0	
LguI	!NNNNGAAGAGC	2	3085; 3295

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
LpnI	RGC!GCT	5	596; 2006; 2014; 2742; 4417
LpnPI	CCDGNNNNNNNNN!	61	102; 295; 614; 670; 814; 871; 919; 953; 1015; 1030; 1091; 1125; 1159; 1183; 1207; 1269; 1356; 1478; 1783; 1972; 2195; 2233; 2249; 2289; 2344; 2361; 2461; 2546; 2659; 2736; 2758; 2781; 2917; 2931; 2950; 3007; 3074; 3124; 3140; 3197; 3255; 3464; 3530; 3554; 3630; 3719; 3822; 3855; 4086; 4104; 4250; 4270; 4294; 4320; 4369; 4467; 4512; 4542; 4621; 4646; 4683
LpnPI	!NNNNNNNNNNNNNCHGG	54	75; 268; 552; 586; 642; 844; 892; 988; 1089; 1241; 1260; 1329; 1354; 1824; 1944; 2001; 2064; 2262; 2274; 2334; 2346; 2578; 2623; 2666; 2708; 2730; 2758; 2805; 2867; 2889; 2979; 3046; 3069; 3113; 3208; 3227; 3252; 3401; 3502; 3545; 3602; 3692; 3795; 3822; 3840; 4076; 4113; 4266; 4292; 4432; 4450; 4485; 4566; 4619
Lsp1109I	GCAGCNNNNNNNN!	8	893; 1335; 1529; 2814; 2856; 3377; 3830; 4330
Lsp1109I	!NNNNNNNNNNNGCTGC	7	1012; 2023; 2688; 2872; 2965; 4031; 4237
LweI	GCATCNNNNN!	7	920; 1557; 2320; 2392; 3040; 3104; 3379
LweI	!NNNNNNNNNGATGC	8	357; 1073; 1112; 1241; 2699; 2954; 3170; 4562
MabI	A!CCWGGT	1	2330
MaeI	C!TAG	9	592; 1361; 1396; 1590; 2008; 2564; 3579; 3913; 4166
MaeII	A!CGT	16	122; 134; 175; 258; 339; 444; 1040; 1316; 1801; 1813; 1856; 1966; 2857; 3044; 3825; 3958
MaeIII	!GTNAC	12	61; 148; 497; 1529; 2030; 2042; 2861; 3167; 3857; 4123; 4239; 4302
MalI	GA!TC	25	587; 611; 662; 700; 814; 964; 1048; 1224; 1400; 2580; 2584; 2603; 2914; 2992; 3073; 3082; 3160; 3536; 3552; 3911; 3923; 4001; 4009; 4020; 4095
MaqI	CRTTGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	4	144; 197; 466; 540
MaqI	!NNNNNNNNNNNNNNNNNNNNNGTCAAYG	3	157; 240; 426
MauBI	CG!CGCGCG	0	
MbiI	CCG!CTC	2	2165; 3354
MbiI	GAG!CGG	3	1384; 2001; 3408
MboI	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
MboII	GAAGANNNNNNNN!	7	988; 1101; 1997; 2225; 3102; 3312; 3931
MboII	!NNNNNNNTCTTC	4	3392; 3559; 3759; 4002
McaTI	GCGC!GC	0	
MfeI	C!AATTG	1	1491
MfiI	R!GATCY	11	585; 609; 660; 1222; 2912; 3158; 3550; 3909; 3921; 4007; 4018
MhII	GDGCH!C	14	620; 657; 739; 766; 799; 1376; 1932; 2687; 2780; 2854; 3044; 3106; 3816; 4349
MisI	TGG!CCA	2	1342; 2823
MluI	A!CGCGT	0	
MluNI	TGG!CCA	2	1342; 2823
MlyI	GAGTCNNNNN!	2	1793; 2225
MlyI	!NNNNNGACTC	6	404; 598; 1386; 1800; 3406; 4283
Mly113I	GG!CGCC	1	2741
MmeI	TCCRACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	2	1094; 1834
MmeI	!NNNNNNNNNNNNNNNNNNNGTYGGA	2	4266; 4450
MnII	CCTCNNNNNNN!	12	845; 1024; 1039; 1216; 1255; 1460; 2524; 3342; 3548; 3862; 4232; 4556
MnII	!NNNNNGAGG	23	541; 678; 726; 765; 786; 819; 936; 953; 1101; 1144; 1290; 1420; 1885; 2216; 2494; 2537; 2552; 2592; 2656; 2792; 3149; 3579; 4482
Mph1103I	ATGCA!T	3	2313; 2385; 4716
MreI	CG!CCGGCG	0	
MroI	T!CCGGA	0	
MroNI	G!CCGGC	3	1958; 3241; 3524
MroXI	GAANN!NNTTC	0	
MscI	TGG!CCA	2	1342; 2823
MseI	T!TAA	16	7; 926; 1442; 1503; 1624; 1645; 1656; 1668; 1679; 1696; 1794; 2065; 3884; 3898; 3903; 3955
MslI	CAYNN!NNRTG	4	365; 715; 1120; 3178
MspI	C!CGG	20	601; 657; 667; 1256; 1959; 2646; 2723; 2745; 2773; 2904; 2994; 3061; 3242; 3517; 3525; 3617; 4091; 4281; 4307; 4454
Msp20I	TGG!CCA	2	1342; 2823
MspA1I	CMG!CKG	8	651; 1135; 1142; 1379; 2239; 2847; 4076; 4321

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
MspCI	C!TTAAG	1	1623
MspJI	CNNRNNNNNNNNNN!	242	36; 50; 71; 97; 113; 127; 147; 167; 197; 219; 236; 251; 290; 306; 319; 332; 352; 373; 407; 424; 449; 481; 500; 523; 548; 574; 596; 613; 627; 640; 662; 679; 690; 705; 723; 741; 771; 789; 804; 821; 837; 870; 885; 913; 928; 952; 965; 981; 999; 1013; 1029; 1042; 1056; 1077; 1090; 1111; 1124; 1144; 1158; 1174; 1189; 1206; 1219; 1233; 1246; 1260; 1281; 1294; 1313; 1332; 1355; 1368; 1381; 1401; 1414; 1429; 1448; 1465; 1478; 1519; 1533; 1546; 1564; 1602; 1617; 1635; 1676; 1700; 1720; 1738; 1759; 1782; 1814; 1829; 1851; 1869; 1882; 1903; 1920; 1933; 1946; 1962; 1975; 2005; 2020; 2045; 2063; 2076; 2091; 2115; 2129; 2153; 2178; 2194; 2232; 2248; 2287; 2301; 2315; 2343; 2359; 2373; 2387; 2416; 2429; 2450; 2459; 2481; 2511; 2527; 2545; 2575; 2598; 2622; 2646; 2665; 2693; 2719; 2735; 2748; 2771; 2785; 2805; 2818; 2832; 2851; 2865; 2878; 2894; 2909; 2922; 2938; 2953; 2969; 2994; 3013; 3029; 3042; 3055; 3073; 3087; 3101; 3117; 3139; 3155; 3174; 3196; 3212; 3235; 3254; 3268; 3284; 3298; 3318; 3334; 3347; 3369; 3402; 3416; 3436; 3449; 3463; 3517; 3530; 3553; 3566; 3585; 3602; 3629; 3665; 3698; 3717; 3742; 3763; 3790; 3803; 3820; 3834; 3849; 3865; 3925; 3950; 3966; 3988; 4001; 4015; 4046; 4060; 4085; 4103; 4118; 4131; 4150; 4163; 4178; 4207; 4226; 4244; 4269; 4284; 4303; 4319; 4338; 4356; 4372; 4386; 4405; 4432; 4455; 4477; 4496; 4511; 4524; 4541; 4561; 4588; 4601; 4620; 4645; 4668; 4682; 4695; 4712
MspJI	!NNNNNNNNNNNNYNG	197	8; 35; 59; 76; 97; 123; 145; 168; 197; 221; 269; 281; 310; 330; 347; 377; 400; 437; 465; 492; 511; 531; 553; 574; 593; 612; 636; 653; 679; 697; 715; 745; 769; 787; 811; 830; 852; 892; 913; 939; 959; 988; 1030; 1064; 1085; 1105; 1132; 1156; 1180; 1213; 1234; 1253; 1279; 1301; 1324; 1342; 1367; 1393; 1422; 1451; 1493; 1576; 1611; 1638; 1661; 1690; 1734; 1756; 1788; 1824; 1841; 1862; 1899; 1919; 1936; 1953; 1988; 2006; 2024; 2041; 2065; 2087; 2114; 2142; 2168; 2206; 2227; 2244; 2262; 2285; 2306; 2334; 2357; 2378; 2396; 2417; 2434; 2457; 2481; 2501; 2519; 2541; 2572; 2594; 2620; 2639; 2656; 2684; 2703; 2722; 2740; 2758; 2779; 2801; 2825; 2858; 2878; 2896; 2917; 2943; 2970; 2987; 3004; 3021; 3047; 3069; 3091; 3109; 3129; 3148; 3170; 3208; 3228; 3252; 3272; 3292; 3319; 3343; 3376; 3395; 3423; 3445; 3474; 3502; 3527; 3546; 3565; 3586; 3603; 3620; 3651; 3678; 3698; 3721; 3741; 3778; 3795; 3814; 3840; 3860; 3899; 3926; 3945; 3963; 4000; 4018; 4059; 4077; 4103; 4120; 4152; 4181; 4209; 4230; 4253; 4272; 4293; 4311; 4328; 4346; 4372; 4393; 4413; 4433; 4451; 4472; 4498; 4515; 4534; 4553; 4582; 4601; 4619; 4638; 4656; 4674; 4697
MspR9I	CC!NGG	22	90; 283; 657; 658; 859; 907; 1003; 1256; 1344; 2277; 2332; 2349; 2745; 2905; 3128; 3518; 3707; 3810; 4282; 4500; 4513; 4634
MssI	GTTT!AAC	0	
MunI	C!AATTG	1	1491
MvaI	CC!WGG	15	90; 283; 859; 907; 1003; 1344; 2277; 2332; 2349; 3128; 3707; 3810; 4500; 4513; 4634
MvaI269I	GAATGCN!	1	1492
MvaI269I	G!CATTC	1	1585
MvnI	CG!CG	16	60; 651; 1390; 1665; 2041; 2061; 2085; 2116; 2807; 3108; 3546; 3630; 3693; 3762; 4035; 4616
MvrI	CGAT!CG	0	
MwoI	GCNNNNN!NNGC	26	90; 212; 244; 283; 376; 400; 1151; 1968; 1998; 2025; 2067; 2308; 2380; 2431; 2510; 2732; 2816; 2839; 2978; 3101; 3184; 3451; 3638; 3842; 4041; 4613
NaeI	GCC!GGC	3	1960; 3243; 3526
NarI	GG!CGCC	1	2741
NciI	CC!SGG	7	657; 658; 1256; 2745; 2905; 3518; 4282
NcoI	C!CATGG	4	360; 677; 2470; 3173
NdeI	CA!TATG	1	234
NdeII	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
NgoAVIII	GACNNNNNTGANNNNNNNNNNNN!	1	280
NgoAVIII	!NNNNNNNNNNNTCANNNNNGTC	1	803
NgoAVIII	TCANNNNNGTCNNNNNNNNNNNN!	1	839
NgoAVIII	!NNNNNNNNNNNGACNNNNNTGA	1	244

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
NgoMIV	G!CCGGC	3	1958; 3241; 3524
NheI	G!CTAGC	1	591
NlaIII	CATG!	21	304; 364; 681; 714; 720; 732; 876; 956; 2171; 2311; 2383; 2474; 2615; 2960; 3146; 3177; 3203; 3559; 3943; 4663; 4714
NlaIV	GGN!NCC	19	467; 647; 655; 662; 738; 798; 1896; 1917; 1929; 2120; 2281; 2353; 2742; 2777; 3625; 3704; 3749; 4592; 4631
NlaCI	CATCACNNNNNNNNNNNNNNNNNN!	3	1573; 1888; 3480
NlaCI	!NNNNNNNNNNNNNNNNNGTGATG	3	347; 1063; 4552
Nii3877I	CYCGR!G	2	617; 660
NmeAIII	GCCGAGNNNNNNNNNNNNNNNNNN!	2	2530; 2966
NmeAIII	!NNNNNNNNNNNNNNNNNNCTCGGC	2	1079; 2495
NmeDI	RCCGGYNNNNNNN!	5	678; 1970; 3072; 3253; 3536
NmeDI	!NNNNNNNNNNNNRCCGGY	5	653; 1945; 3047; 3228; 3511
NmuCI	!GTSAC	3	2030; 2861; 3167
NotI	GC!GGCCGC	1	1385
NruI	TCG!CGA	0	
NsbI	TGC!GCA	1	2843
NsiI	ATGCA!T	3	2313; 2385; 4716
NspI	RCATG!Y	5	714; 2311; 2383; 3146; 4663
NspV	TT!CGAA	2	627; 3423
OliI	CACNN!NNGTG	0	
PabI	GTA!C	12	220; 245; 300; 333; 384; 541; 648; 728; 878; 1130; 1349; 3048
PacI	TTAAT!TAA	0	
PaeI	GCATG!C	3	2311; 2383; 3146
PaeR7I	C!TCGAG	1	613
PagI	T!CATGA	2	2167; 3939
PalAI	GG!CGCGCC	0	
PasI	CC!CWGGG	3	906; 3706; 3809
PauI	G!CGCGC	0	
PceI	AGG!CCT	1	2562
PciI	A!CATGT	1	4659
PciSI	GCTCTCN!	0	
PciSI	!NNNNGAAGAGC	2	3085; 3295
PcsI	WCGNNNN!NNNCGW	7	1325; 3035; 3112; 3355; 3429; 3822; 4340
PctI	GAATGCN!	1	1492
PctI	G!CATTC	1	1585
PdiI	GCC!GGC	3	1960; 3243; 3526
PdmI	GAANN!NNTTC	0	
PfeI	G!AWTC	6	1289; 3226; 3360; 3470; 3507; 4685
Pfi23II	C!GTACG	0	
PfifI	GACN!NNGTC	1	2859
PfIMI	CCANNNN!NTGG	0	
PfoI	T!CCNGGA	1	3516
PhoI	GG!CC	30	84; 277; 655; 749; 833; 1076; 1111; 1145; 1154; 1168; 1300; 1342; 1387; 1707; 1849; 2504; 2510; 2519; 2562; 2649; 2823; 3214; 3241; 3750; 3807; 3840; 4185; 4619; 4637; 4648
PinAI	A!CCGGT	1	666
PlaDI	CATCAGNNNNNNNNNNNNNNNNNN!	1	3122
PlaDI	!NNNNNNNNNNNNNNNNNNCTGATG	2	2687; 2942
PleI	GAGTCNNNN!	2	1792; 2224
PleI	!NNNNNGACTC	6	404; 598; 1386; 1800; 3406; 4283
Ple19I	CGAT!CG	0	
PmaCI	CAC!GTG	0	
PmeI	GTTT!AAAC	0	
PmlI	CAC!GTG	0	
PpiI	GAACNNNNNCTCNNNNNNNNNNNN!	1	1823
PpiI	!NNNNNNNNGAGNNNNNGTTC	1	3953
PpiI	GAGNNNNNGTTCNNNNNNNNNNNN!	1	3985
PpiI	!NNNNNNNGAACNNNNNCTC	1	1791
PpsI	GAGTCNNNN!	2	1792; 2224
PpsI	!NNNNNGACTC	6	404; 598; 1386; 1800; 3406; 4283
Ppu10I	A!TGCAT	3	2309; 2381; 4712
Ppu21I	YAC!GTR	3	340; 1857; 3045
PpuMI	RG!GWCCY	0	

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
PscI	A!CATGT	1	4659
PshAI	GACNN!NNGTC	1	1315
PshBI	AT!TAAT	1	7
PsiI	TTA!TAA	2	1524; 1729
Psp03I	GGWC!C	2	3260; 3705
Psp5II	RG!GWCCY	0	
Psp6I	!CCWGG	15	88; 281; 857; 905; 1001; 1342; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
Psp1406I	AA!CGTT	0	
Psp124BI	GAGCT!C	1	620
PspCI	CAC!GTG	0	
PspEI	G!GTNACC	0	
PspGI	!CCWGG	15	88; 281; 857; 905; 1001; 1342; 2275; 2330; 2347; 3126; 3705; 3808; 4498; 4511; 4632
PspLI	C!GTACG	0	
PspN4I	GGN!NCC	19	467; 647; 655; 662; 738; 798; 1896; 1917; 1929; 2120; 2281; 2353; 2742; 2777; 3625; 3704; 3749; 4592; 4631
PspOMI	G!GGCCC	1	653
PspOMII	CGCCARNNNNNNNNNNNNNNNNNNNNN!	3	125; 2471; 3470
PspOMII	!NNNNNNNNNNNNNNNNNNNYTGGGCG	1	2873
PspPI	G!GNCC	12	83; 276; 654; 832; 1075; 1167; 1848; 3257; 3702; 3748; 3806; 3839
PspPPI	RG!GWCCY	0	
PspPRI	CCYAGNNNNNNNNNNNNNNNNNN!	3	2294; 2366; 3872
PspPRI	!NNNNNNNNNNNNNNNNCTGRGG	4	927; 1355; 2207; 3402
PspXI	VC!TCGAGB	0	
PsrI	GAACNNNNNNNTACNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGTANNNNNNGTTC	0	
PsrI	GTANNNNNNGTTCNNNNNNNNNNNN!	0	
PsrI	!NNNNNNNGAACNNNNNNNTAC	0	
PssI	RGGNC!CY	1	3842
PstI	CTGCA!G	1	638
PstNI	CAGNNN!CTG	3	1349; 3842; 4250
PsuI	R!GATCY	11	585; 609; 660; 1222; 2912; 3158; 3550; 3909; 3921; 4007; 4018
Psyl	GACN!NNGTC	1	2859
PteI	G!CGCGC	0	
PvuI	CGAT!CG	0	
PvuII	CAG!CTG	3	1379; 2239; 2847
RcaI	T!CATGA	2	2167; 3939
RceI	CATCGACNNNNNNNNNNNNNNNNNN!	1	3256
RceI	!NNNNNNNNNNNNNNNNNGTCGATG	0	
RgaI	GCGAT!CGC	0	
RigI	GGCCGG!CC	0	
RleAI	CCCACANNNNNNNNNNNN!	1	1470
RleAI	!NNNNNNNNNTGTGGG	0	
RpaBI	CCCGCAGNNNNNNNNNNNNNNNNNN!	0	
RpaBI	!NNNNNNNNNNNNNNNNNNCTGCGGG	0	
RpaB5I	CGRGACNNNNNNNNNNNNNNNNNN!	0	
RpaB5I	!NNNNNNNNNNNNNNNNNGTCCYCG	0	
RruI	TCG!CGA	0	
RsaI	GT!AC	12	219; 244; 299; 332; 383; 540; 647; 727; 877; 1129; 1348; 3047
RsaNI	G!TAC	12	218; 243; 298; 331; 382; 539; 646; 726; 876; 1128; 1347; 3046
RseI	CAYNN!NNRTG	4	365; 715; 1120; 3178
RsrII	CG!GWCCG	1	3257
Rsr2I	CG!GWCCG	1	3257
SacI	GAGCT!C	1	620
SacII	CCGC!GG	1	652
SaI	G!TCGAC	1	639
SapI	GCTCTCN!	0	
SapI	!NNNNGAAGAGC	2	3085; 3295
SaqAI	T!TAA	16	7; 926; 1442; 1503; 1624; 1645; 1656; 1668; 1679; 1696; 1794; 2065; 3884; 3898; 3903; 3955

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SatI	GC!NGC	35	831; 882; 1026; 1143; 1324; 1385; 1388; 1518; 2037; 2059; 2073; 2511; 2650; 2702; 2713; 2803; 2808; 2845; 2886; 2973; 2976; 2979; 3215; 3311; 3352; 3366; 3480; 3819; 3834; 4045; 4251; 4254; 4319; 4462; 4617
Sau96I	G!GNCC	12	83; 276; 654; 832; 1075; 1167; 1848; 3257; 3702; 3748; 3806; 3839
Sau3AI	!GATC	25	585; 609; 660; 698; 812; 962; 1046; 1222; 1398; 2578; 2582; 2601; 2912; 2990; 3071; 3080; 3158; 3534; 3550; 3909; 3921; 3999; 4007; 4018; 4093
SbfI	CCTGCA!GG	0	
ScaI	AGT!ACT	0	
SchI	GAGTCNNNNN!	2	1793; 2225
SchI	!NNNNNGACTC	6	404; 598; 1386; 1800; 3406; 4283
SciI	CTC!GAG	1	615
ScrFI	CC!NGG	22	90; 283; 657; 658; 859; 907; 1003; 1256; 1344; 2277; 2332; 2349; 2745; 2905; 3128; 3518; 3707; 3810; 4282; 4500; 4513; 4634
SdaI	CCTGCA!GG	0	
SdeAI	CAGRAGNNNNNNNNNNNNNNNNNNNN!	5	1113; 2319; 2391; 2560; 4502
SdeAI	!NNNNNNNNNNNNNNNNNNNNCTYCTG	2	2896; 3381
SdeOSI	GACNNNNRTGANNNNNNNNNNN!	1	279
SdeOSI	!NNNNNNNNNNNTCAYNNNNNGTC	0	
SdeOSI	TCAYNNNNNGTCNNNNNNNNNNNN!	0	
SdeOSI	!NNNNNNNNNNNGACNNNNRTGA	1	245
SduI	GDGCH!C	14	620; 657; 739; 766; 799; 1376; 1932; 2687; 2780; 2854; 3044; 3106; 3816; 4349
SelI	!CGCG	16	58; 649; 1388; 1663; 2039; 2059; 2083; 2114; 2805; 3106; 3544; 3628; 3691; 3760; 4033; 4614
SetI	ASST!	64	125; 137; 178; 261; 308; 342; 447; 552; 568; 620; 626; 698; 821; 871; 892; 1043; 1178; 1196; 1247; 1315; 1319; 1348; 1358; 1381; 1431; 1452; 1461; 1473; 1522; 1689; 1804; 1816; 1859; 1896; 1946; 1969; 2093; 2241; 2336; 2529; 2642; 2770; 2849; 2860; 2932; 3003; 3047; 3307; 3453; 3497; 3828; 3859; 3918; 3961; 4104; 4125; 4224; 4361; 4376; 4395; 4407; 4451; 4497; 4548
SexAI	A!CCWGGT	1	2330
SfaAI	GCGAT!CGC	0	
SfaNI	GCATCNNNNN!	7	920; 1557; 2320; 2392; 3040; 3104; 3379
SfaNI	!NNNNNNNNNGATGC	8	357; 1073; 1112; 1241; 2699; 2954; 3170; 4562
SfcI	C!TRYAG	4	634; 2076; 4203; 4394
SfiI	GGCCNNNN!NGGCC	2	1151; 2516
SfoI	GGC!GCC	1	2742
Sfr274I	C!TCGAG	1	613
Sfr303I	CCGC!GG	1	652
SfuI	TT!CGAA	2	627; 3423
SgeI	CNNGNNNNNNNN!	188	6; 36; 71; 97; 123; 223; 236; 252; 290; 307; 336; 373; 407; 426; 491; 548; 579; 604; 625; 662; 679; 690; 705; 723; 741; 771; 795; 813; 828; 870; 885; 918; 952; 965; 993; 1014; 1029; 1056; 1090; 1111; 1124; 1144; 1158; 1182; 1197; 1221; 1239; 1260; 1281; 1294; 1332; 1355; 1368; 1381; 1401; 1448; 1477; 1519; 1602; 1676; 1760; 1782; 1814; 1851; 1869; 1888; 1903; 1945; 1962; 1979; 2014; 2028; 2045; 2067; 2091; 2115; 2180; 2194; 2232; 2248; 2288; 2301; 2320; 2343; 2360; 2373; 2392; 2422; 2443; 2460; 2483; 2518; 2545; 2576; 2598; 2624; 2646; 2665; 2693; 2729; 2748; 2771; 2785; 2805; 2818; 2832; 2851; 2865; 2884; 2916; 2930; 2943; 2969; 3000; 3013; 3030; 3047; 3061; 3078; 3096; 3111; 3139; 3155; 3174; 3196; 3212; 3235; 3254; 3279; 3298; 3318; 3345; 3369; 3402; 3421; 3449; 3463; 3529; 3553; 3568; 3591; 3612; 3629; 3677; 3704; 3718; 3747; 3771; 3804; 3821; 3841; 3854; 3867; 3925; 3952; 3971; 4001; 4026; 4046; 4060; 4085; 4103; 4140; 4178; 4207; 4235; 4249; 4269; 4284; 4305; 4319; 4338; 4356; 4372; 4412; 4432; 4459; 4477; 4498; 4511; 4524; 4541; 4565; 4588; 4620; 4645; 4672; 4694

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
SgeI	!NNNNNNNNNNNNNCNNG	163	10; 45; 71; 97; 197; 226; 264; 281; 310; 347; 381; 400; 465; 522; 553; 578; 599; 636; 653; 679; 697; 715; 745; 769; 787; 811; 844; 892; 926; 967; 988; 1030; 1064; 1085; 1105; 1132; 1156; 1180; 1213; 1234; 1255; 1279; 1306; 1329; 1347; 1375; 1422; 1451; 1493; 1576; 1650; 1734; 1756; 1788; 1825; 1843; 1862; 1919; 1936; 1953; 1988; 2006; 2026; 2046; 2065; 2089; 2154; 2206; 2262; 2294; 2317; 2334; 2366; 2396; 2417; 2434; 2457; 2492; 2519; 2550; 2572; 2598; 2620; 2639; 2667; 2703; 2722; 2745; 2766; 2784; 2801; 2825; 2858; 2890; 2917; 2943; 2974; 3004; 3021; 3047; 3070; 3091; 3113; 3133; 3153; 3170; 3209; 3228; 3253; 3272; 3292; 3319; 3343; 3376; 3395; 3423; 3445; 3503; 3527; 3546; 3565; 3586; 3603; 3651; 3678; 3698; 3721; 3745; 3778; 3795; 3815; 3841; 3899; 3926; 3945; 3975; 4000; 4020; 4059; 4077; 4114; 4152; 4181; 4209; 4230; 4258; 4279; 4312; 4330; 4386; 4406; 4433; 4451; 4472; 4498; 4515; 4539; 4562; 4594; 4619; 4646; 4668; 4697
SgfI	GCGAT!CGC	0	
SgrAI	CR!CCGGYG	0	
SgrBI	CCGC!GG	1	652
SgrDI	CG!TCGACG	0	
SgsI	GG!CGCGCC	0	
SimI	GG!GTC	4	27; 1888; 3675; 4468
SimI	!GACCC	4	106; 3169; 3737; 3985
SinI	G!GWCC	2	3257; 3702
SlaI	C!TCGAG	1	613
SmaI	CCC!GGG	1	658
SmiI	ATTT!AAAT	0	
SmiMI	CAYNN!NNRTG	4	365; 715; 1120; 3178
SmlI	C!TYRAG	9	613; 619; 1207; 1246; 1623; 3132; 4014; 4291; 4553
SmoI	C!TYRAG	9	613; 619; 1207; 1246; 1623; 3132; 4014; 4291; 4553
SmuI	CCCGCNNNN!	10	93; 119; 286; 1140; 1242; 2063; 2418; 2439; 3635; 3767
SmuI	!NNNNNNGCGGG	7	644; 1177; 1994; 2864; 3401; 3539; 3686
SnaBI	TAC!GTA	1	340
SpeI	A!CTAGT	0	
SphI	GCATG!C	3	2311; 2383; 3146
SrfI	GCCC!GGGC	0	
Sse9I	!AATT	11	18; 629; 1491; 1555; 1633; 1659; 1670; 2317; 2389; 2481; 3899
Sse8387I	CCTGCA!GG	0	
Sse8647I	AG!GWCCT	0	
SseBI	AGG!CCT	1	2562
SsiI	C!CGC	37	58; 86; 98; 112; 279; 507; 589; 649; 806; 995; 1133; 1235; 1388; 2056; 2059; 2073; 2163; 2411; 2423; 2432; 2444; 2454; 2465; 2511; 2650; 2713; 3215; 3260; 3326; 3352; 3477; 3480; 3628; 3760; 4067; 4211; 4707
SsiI	G!CGG	28	370; 403; 528; 651; 830; 1142; 1184; 1384; 2001; 2028; 2116; 2226; 2807; 2871; 2972; 2975; 3255; 3310; 3408; 3546; 3693; 3833; 4076; 4321; 4442; 4461; 4588; 4616
SspI	AAT!ATT	2	1649; 2202
SspDI	G!GCGCC	1	2740
SspD5I	GGTGANNNNNNNN!	4	376; 1068; 3812; 3928
SspD5I	!NNNNNNNNNTCACC	3	956; 1857; 2918
SstI	GAGCT!C	1	620
SstII	CCGC!GG	1	652
SstE37I	CGAAGACNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN!	1	1001
SstE37I	!NNNNNNNNNNNNNNNNNNNGTCTTCG	0	
Sth132I	CCCGNNNN!	20	92; 118; 285; 663; 923; 1139; 1241; 1262; 1940; 2062; 2417; 2438; 2751; 3154; 3293; 3364; 3634; 3766; 3996; 4434
Sth132I	!NNNNNNNNNCGGG	22	15; 407; 470; 643; 972; 1044; 1176; 1941; 1993; 2094; 2821; 2863; 2896; 3400; 3509; 3538; 3685; 3789; 3820; 4273; 4317; 4525
Sth302II	CC!GG	20	602; 658; 668; 1257; 1960; 2647; 2724; 2746; 2774; 2905; 2995; 3062; 3243; 3518; 3526; 3618; 4092; 4282; 4308; 4455
StrI	C!TCGAG	1	613
StsI	GGATGNNNNNNNNNN!	4	2609; 3066; 3091; 3545
StsI	!NNNNNNNNNNNNNNNNCATCC	5	752; 840; 897; 1052; 2413
StuI	AGG!CCT	1	2562
StyI	C!CWWGG	6	360; 677; 2470; 2563; 3173; 3578

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
StyD4I	!CCNGG	22	88; 281; 655; 656; 857; 905; 1001; 1254; 1342; 2275; 2330; 2347; 2743; 2903; 3126; 3516; 3705; 3808; 4280; 4498; 4511; 4632
SwaI	ATTT!AAAT	0	
TaaI	ACN!GT	16	76; 198; 269; 543; 581; 645; 725; 741; 1832; 3121; 3237; 3345; 3668; 4159; 4629; 4700
TaiI	ACGT!	16	125; 137; 178; 261; 342; 447; 1043; 1319; 1804; 1816; 1859; 1969; 2860; 3047; 3828; 3961
TaqI	T!CGA	17	614; 627; 640; 824; 851; 1319; 1890; 2581; 2854; 3010; 3034; 3070; 3232; 3423; 3468; 3723; 4561
TaqII	GACCGANNNNNNNNNNN!	3	1761; 2778; 3446
TaqII	!NNNNNNNNNTCGGTC	1	3690
TaqII	CACCCANNNNNNNNNNN!	2	814; 919
TaqII	!NNNNNNNNNTGGGTG	3	172; 2645; 3237
TasI	!AATT	11	18; 629; 1491; 1555; 1633; 1659; 1670; 2317; 2389; 2481; 3899
TatI	W!GTACW	5	217; 297; 330; 381; 725
TauI	GCSG!C	19	833; 1145; 1387; 1390; 2061; 2075; 2513; 2652; 2715; 2810; 2975; 2978; 3217; 3313; 3354; 3482; 3836; 4464; 4619
TfiI	G!AWTC	6	1289; 3226; 3360; 3470; 3507; 4685
ThiI	C!TCGAG	1	613
TruII	T!TAA	16	7; 926; 1442; 1503; 1624; 1645; 1656; 1668; 1679; 1696; 1794; 2065; 3884; 3898; 3903; 3955
Tru9I	T!TAA	16	7; 926; 1442; 1503; 1624; 1645; 1656; 1668; 1679; 1696; 1794; 2065; 3884; 3898; 3903; 3955
TscAI	CASTGNN!	6	1204; 1587; 2870; 3980; 4251; 4264
TseI	G!CWGC	16	881; 1025; 1323; 1517; 2036; 2701; 2802; 2844; 2885; 2978; 3365; 3818; 4044; 4250; 4253; 4318
TsoI	TARCCANNNNNNNNNNN!	2	1713; 2060
TsoI	!NNNNNNNNNTGGYTA	3	850; 1518; 3270
Tsp45I	!GTSAC	3	2030; 2861; 3167
Tsp509I	!AATT	11	18; 629; 1491; 1555; 1633; 1659; 1670; 2317; 2389; 2481; 3899
TspDTI	ATGAANNNNNNNNNNN!	4	733; 1499; 2800; 3504
TspDTI	!NNNNNNNNNTTCAT	5	26; 861; 3218; 3674; 3881
TspEI	!AATT	11	18; 629; 1491; 1555; 1633; 1659; 1670; 2317; 2389; 2481; 3899
TspGWI	ACGGANNNNNNNNNNN!	1	3616
TspGWI	!NNNNNNNNNTCCGT	0	
TspMI	C!CCGGG	1	656
TspRI	CASTGNN!	6	1204; 1587; 2870; 3980; 4251; 4264
TstI	CACNNNNNNNTCCNNNNNNNNNNNN!	0	
TstI	!NNNNNNNGGANNNNNNGTG	0	
TstI	GGANNNNNNGTGNNNNNNNNNNNN!	0	
TstI	!NNNNNNNNCACNNNNNTCC	0	
Tth111I	GACN!NNGTC	1	2859
Tth111II	CAARCANNNNNNNNNNN!	1	4068
Tth111II	!NNNNNNNNNTGYTTG	3	3176; 4036; 4075
UnbI	!GGNCC	12	82; 275; 653; 831; 1074; 1166; 1847; 3256; 3701; 3747; 3805; 3838
Van9II	CCANNNN!NTGG	0	
Vha464I	C!TTAAG	1	1623
VneI	G!TGCAC	2	762; 4345
VpaK11AI	!GGWCC	2	3256; 3701
VpaK11BI	G!GWCC	2	3257; 3702
VspI	AT!TAAT	1	7
XagI	CCTNN!NNNAGG	0	
XapI	R!AATTY	4	629; 1555; 1659; 1670
XbaI	T!CTAGA	1	1395
XceI	RCATG!Y	5	714; 2311; 2383; 3146; 4663
XcmI	CCANNNNN!NNNTGG	0	
XhoI	C!TCGAG	1	613
XhoII	R!GATCY	11	585; 609; 660; 1222; 2912; 3158; 3550; 3909; 3921; 4007; 4018
XmaI	C!CCGGG	1	656
XmaJI	C!CTAGG	2	2563; 3578
XmiI	GT!MKAC	1	640
XmnI	GAANN!NNTTC	0	
XspI	C!TAG	9	592; 1361; 1396; 1590; 2008; 2564; 3579; 3913; 4166
ZraI	GAC!GTC	4	123; 176; 259; 445

Enzyme name	Sequence	Count	Cutting Position (the base to the left of the cut site)
ZrmI	AGT!ACT	0	
Zsp2I	ATGCA!T	3	2313; 2385; 4716